

Remarks

Applicants make no further amendments to the claims as it is firmly believed that the invention as presently claimed is both novel and non-obvious over the cited art. Furthermore, Applicants maintain the pertinence of their previous responses.

Claim Rejections – 35 USC § 102

Examiner rejects claims 1-2, 5, 7, 9-11, 14, 16, 18-19, 21, 24-26, 29-32, 34-35 and 40-41 under 35 USC § 102(b) as being anticipated by *Kamm et al.* (US 5,457,680).

Considering firstly claim 1, Examiner continues to reject this claim in view of passages of *Kamm* at col.10 lines 39-49 and col.26 lines 50-60.

Applicants have previously explained why *Kamm* is deficient. In this latest Action Examiner has provided some further reasoning for the rejection of claim 1. Examiner reasons that:

“...the poor signal strength....is a fault in the communication path. The isolated connection cannot, therefore, be selected. Alternate path is selected which is expressly disclosed by *Kamm*...”

Respectfully, this reasoning confirms that Examiner does not understand *Kamm*. Applicants will attempt to describe, in simple terms, the manner in which *Kamm* operates and why this fundamentally differs from the present invention.

Kamm describes a form of mobility management in a mobile data communication network. In *Kamm*, traffic is routed between a network 100 and mobile terminals (SU_1, SU_2 etc.). Network 100 is connected to several mobile data gateways (MDG). Fig.1A shows a system with two such gateways - MDG1, MDG2. Each mobile data gateway connects to a pair of base stations – e.g. MDG1, 104 connects to base stations B1, B2 and MDG2, 204 connects to B3, B4. Each mobile terminal is

allocated to one of the MDGs and this is called the home gateway of that terminal. Gateway MDG1 is the home gateway of terminal SU_1. As a mobile terminal roams further away from B1, it will move into the coverage areas of other base stations and will experience a better signal strength from those other base stations. Fig.1D shows an example where terminal SU_1 has roamed from BS2 (which is under the control of MDG1) to BS3 (which is under the control of MDG2). As the terminal is now served by a base station which is controlled by a different MDG, the home gateway of terminal SU-1, MDG1, stores a forwarding address (110, Fig.1D) so that data packets can be correctly routed to the terminal.

The passages of Kamm which the Examiner has consistently applied describe the above method. The passage of Kamm at col.10 lines 39-49 describes the creation of a forwarding address for a terminal when the terminal moves between base stations served by different MDGs. The passage of Kamm at col.26 lines 50-60 (part of claim 1) describes part of the process of deciding which base station and MDG should serve a mobile terminal.

When network 100 wishes to send a data packet to a terminal, it first sends the packet to the home gateway of that terminal (MDG1). If there is a forwarding address 110 for that terminal, the packet is then forwarded to the gateway indicated by that forwarding table entry. This process is described at col.7 lines 4-34 of Kamm. So, when terminal SU_1 is served by base stations B1 or B2, packets are routed along a link between network 100 and MDG1. When terminal SU_1 roams away from B1 or B2 and is served by B3 or B4 (i.e. B3 or B4 provide a better quality of communication), packets are still routed, in the first instance, along the same link between network 100 and MDG1. Indeed, packets have to be routed along this link, to MDG1, as this is the only way in which the position of terminal SU_1 can be tracked.

It can be seen that at all times traffic is always first routed to the home gateway of a mobile terminal along the same route.

Examiner reasoned:

“...the poor signal strength...is a fault in the communication path. The isolated connection cannot, therefore, be selected. Alternate path is selected which is expressly disclosed by *Kamm*...”

In the light of the above explanation, it should be clear that Examiner's reasoning is incorrect. Respectfully, Examiner appears to be confusing the “isolated connection” of the present invention with the “radio channel” of *Kamm*. In the present invention, the “isolated connection” is the connection (e.g. 60, Fig.1) between the core network (12) and a gateway (24). In *Kamm*, the radio channel is the radio link (e.g. 10, Fig.1A) between a base station (B1) and a terminal (SU_1). These are very different.

In *Kamm*, the signal strength on a radio channel between a mobile terminal and various base stations determines which base station (and hence gateway) serves the terminal. It has no impact on the routing of a data packet between network 100 and MDG1. At all times, the packet is routed from network 100 to MDG1 along the same link. When a terminal moves from one gateway to another gateway, this has no impact on the “isolated connection” which is selected. *Kamm* is not concerned with whether the links between MDG1, MDG2 and network 100 can support access to network 100. As explained above, all packets have to be routed along the same link to the home network as network 100 has no way of tracking where a mobile terminal is currently located.

In the present invention (please see Fig.1), first and second gateways (e.g. gateways 24, 28) are locally interconnected 86. Each gateway has an isolated connection (links 60, 64) with a core network 12. If the isolated connection 60 between the core network 12 and a first gateway 24 is not operational or has insufficient bandwidth

(i.e. the isolated connection 60 is unable to support access to the core network 12), the gateway 24 accesses the core network via an isolated connection 64 between the core network 12 and the second gateway 28. As the first and second gateways are locally interconnected 86, the first gateway 24 therefore has an indirect path to the core network 12 via the interconnection 86 with the second gateway 28 and the isolated connection 64 between the core network 12 and the second gateway 28.

It is believed this explanation demonstrates why there is a clear distinction between Kamm and the present invention as defined by independent claims 1, 9, 18, 24, 31, 36, 39 and 40 and thus why these claims are allowable. The remaining rejected claims (claims 2, 5, 7, 10, 11, 14, 16, 19, 21, 25, 26, 29, 30, 32 and 41) are considered allowable at least by virtue of their dependency on an allowable base claim.

Claim Rejections – 35 USC § 103

Examiner continues to reject claims 3, 12, 27 and 42 under 35 USC § 103(a) as being obvious over *Kamm et al* in view of *Mahalingaiah* (US 6,654,346). It is respectfully submitted that the rejected claims are allowable at least by virtue of the allowability of the claims on which they depend.

Kamm is deficient for the reasons explained above. *Mahalingaiah* does not provide any teaching of routing between a gateway and a core network via a direct path or indirect path depending on the ability of an isolated connection to support access. Therefore, even a combination of *Kamm* and *Mahalingaiah* does not disclose the features of claims 1, 9, 24 or 40, from which the rejected claims depend.

Examiner rejects claims 4, 13, 20, 28 and 33 under 35 USC § 103(a) as being obvious over *Kamm et al* in view of *Shionozaki* (US 6,496,479). These claims are considered to be allowable at least by virtue of the allowability of the claims on which they depend.

Kamm is deficient for the reasons explained above. *Shionozaki* does not provide any teaching of routing between a gateway and a core network via a direct path or indirect path depending on the ability of an isolated connection to support access. Therefore, even a combination of *Kamm* and *Shionozaki* does not disclose the features of claims 1, 9, 18, 24 or 31, from which the rejected claims depend.

Examiner rejects claims 6, 8, 15, 17, 23, 36, 38 and 39 under 35 USC § 103(a) as being obvious over *Kamm et al.* in view of *Davis et al.* (US 6,167,389). These claims are considered to be allowable at least by virtue of the allowability of the claims on which they depend.

Kamm is deficient for the reasons explained above. *Davis* does not provide any teaching of routing between a gateway and a core network via a direct path or indirect path depending on the ability of an isolated connection to support access. Therefore, even a combination of *Kamm* and *Davis* does not disclose the features of claims 1, 9, 18, 24 or 31, from which the rejected claims depend.

Finally, Examiner rejects claim 37 under 35 USC § 103(a) as being obvious over *Kamm et al* in view of *Davis* and further in view of *Shionozaki*. This claim is considered to be allowable at least by virtue of the allowability of claim 36 on which it depends.

Kamm is deficient for the reasons explained above. Neither *Davis* nor *Shionozaki* provide any teaching of routing between a gateway and a core network via a direct path or indirect path depending on the ability of an isolated connection to support access. Therefore, even a combination of *Kamm*, *Davis* and *Shionozaki* does not disclose the features of claim 36 from which the rejected claim depends.

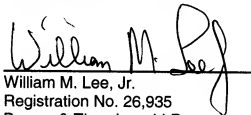
Allowable Subject Matter

The Examiner's indication of the allowability of claims 43-46 is noted and appreciated.

For the foregoing reasons, Applicants respectfully submit that the claims pending in this application are in condition for allowance. Early issuance of a Notice of Allowance is solicited.

May 30, 2006

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William M. Lee, Jr.", is written over a horizontal line.

William M. Lee, Jr.
Registration No. 26,935
Barnes & Thornburg LLP
P.O. Box 2786
Chicago, Illinois 60690-2786
(312) 214-4800
(312) 759-5646 (fax)